Section 12

Pediatric AIDS Cases

Through 1999, 2,152 AIDS cases in children under the age of 13 have been diagnosed in New York State, representing one quarter of all pediatric cases reported in the United States (see Figure 9-3). However, pediatric case rates throughout the state have decreased measurably in the last few years as a result of several factors including decreasing numbers of HIVinfected women giving birth. Equally as important, New York State's strong programmatic emphasis on prenatal HIV testing has led to an increased use of prenatal antiretroviral therapies to prevent perinatal HIV transmission, and increasing use of antiretroviral therapies and PCP prophylaxis to delay onset of AIDS in pediatric patients.

Of the 182 AIDS cases diagnosed 1996-1999 in New York State, more than two-thirds are Black (70.9%), 21.4 percent are Hispanic (see Figure 12-1), and 83.5 percent are residents of New York City (see Figure 12-2). Like adult cases, pneumocystis carinii pneumonia has been the most frequently reported AIDS-defining opportunistic infection among pediatric AIDS cases (see Figure 12-5).

At least 91 percent of pediatric AIDS cases diagnosed in the period 1996-1999 are attributable to perinatal HIV transmission. The mothers of these children were themselves infected primarily through personal use of injecting drugs (20.3%) or through sexual contact with an HIV-infected partner (25.3%). For 45.6 percent, the HIV exposure category of the mother has not been determined (see Figure 12-1). The onset of AIDS in perinatally infected children has been delayed in recent years by

the use of improved treatments in this population. Of perinatally infected pediatric AIDS cases diagnosed in 1996-1999, fewer than half (42.3%) suffered their first AIDS-defining illness before the age of three (see Figure 12-1). The mean age at AIDS diagnosis among perinatally infected children has increased substantially, from 1.3 years in 1982-1985 to 4.1 years in 1996-1999.

Of recent cases diagnosed in New York City, children residing in Brooklyn have the highest AIDS case rate of 16.4 cases per 100,000 children under 13 years. Children residing in Staten Island have the lowest case rate of 3.0 AIDS diagnoses per 100,000 children. The pediatric AIDS case rate in the rest of the state is considerably lower, with 1.6 cases diagnosed per 100,000 children under 13 years (see Figure 12-2).

Figure 12-1

Distribution of Pediatric AIDS Cases Diagnosed in 1996 - 1999 by Age at Diagnosis, Race/Ethnicity, Gender and Exposure Category New York State, Cases Confirmed through March 2000

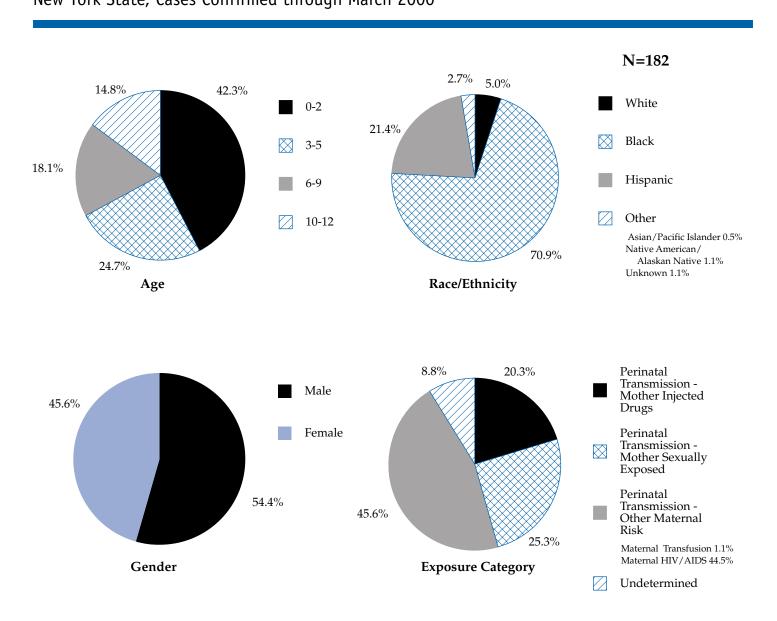


Figure 12-2
Pediatric AIDS Cases Diagnosed 1996 - 1999 by Race/Ethnicity,
Exposure Category, Age at Diagnosis, Case Rate per 100,000
Population and Residence

New York State, Cases Confirmed through March 2000*

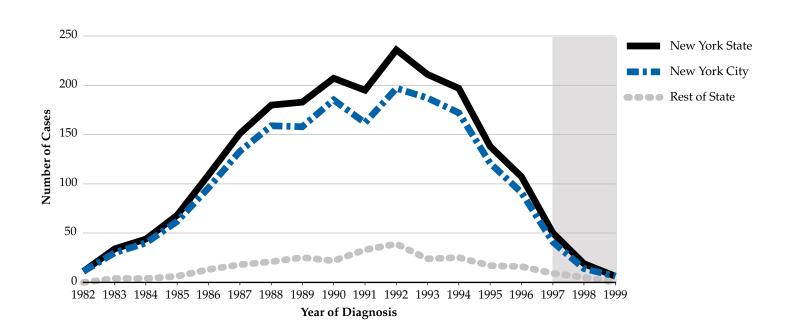
	New York						
	State	Bronx	Brooklyn	Manhattan	Queens	Staten Island	Rest of State
Race/Ethnicity							
White	9	0	1	0	2	1	5
Black	129	21	60	13	14	1	20
Hispanic	39	13	11	9	3	0	3
Asian/Pacific Islander	1	0	1	0	0	0	0
Native American/ Alaskan Native	2	0	0	0	1	0	1
Unknown	2	0	1	0	0	0	1
Exposure Category							
Perinatal Transmission: Mother Injected Drugs	37	5	11	6	5	0	10
Perinatal Transmission: Mother Sexually Exposed	46	10	22	4	6	0	4
Perinatal Transmission: Other Maternal Risk	83	17	37	12	7	2	8
Undetermined	16	2	4	0	2	0	8
Age at Diagnosis							
0-2	77	17	37	7	7	1	8
3-5	45	10	15	7	7	0	6
6-9	33	3	12	5	4	0	9
10-12	27	4	10	3	2	1	7
Total	182	34	74	22	20	2	30
AIDS Case Rate per 100,000 Population [†]	5.8	13.6	16.4	11.8	6.7	3.0	1.6

^{*} Data for 1998 and 1999 are incomplete due to lag in case reporting and time required for case confirmation.

[†] Based on 1990 U.S. Census data for children 0-12 years of age.

Pediatric AIDS Cases by Year of Diagnosis*

New York State, Cases Confirmed through March 2000



	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998†	1999†
New York State	11	34	44	68	109	151	180	183	207	195	236	211	197	138	107	50	19	6
New York City	11	30	40	62	96	133	159	158	185	162	197	187	172	121	91	41	14	6
Rest of State	0	4	4	6	13	18	21	25	22	33	39	24	25	17	16	9	5	0

^{*} All cases younger than 13 years of age at diagnosis.

[†] Data for 1998 and 1999 are incomplete due to lag in case reporting and time required for case confirmation.

Figure 12-4

Cumulative AIDS Cases Among Children Infected Perinatally by Race/Ethnicity, Age at Diagnosis, Residence, Current Age and Mother's Exposure Category

New York State, Cases Confirmed through March 2000

	Mother's Exposure Category									
	Injection Drug User		Sexual (with HI)		Other/ Unknown*					
	Number	Percent	Number	Percent	Number	Percent				
Race/Ethnicity										
White	107	10.2	46	7.9	30	7.0				
Black	574	54.7	286	49.4	303	70.3				
Hispanic	36	34.8	240	41.5	94	21.8				
Asian/Pacific Islander	0		4	0.7	2	0.5				
Native American/										
Alaskan Native	0		2	0.3	1	0.2				
Unknown	4	0.4	1	0.2	1	0.2				
Age at Diagnosis										
0-2 years	668	63.6	374	64.6	263	61.0				
3-5 years	203	19.3	114	19.7	80	18.6				
6-9 years	136	13.0	67	11.6	67	15.5				
10-12 years	43	4.1	24	4.1	21	4.9				
Residence										
Bronx	288	27.4	165	28.5	86	20.0				
Brooklyn	273	26.0	198	34.2	171	39.7				
Manhattan	202	19.2	85	14.7	61	14.2				
Queens	123	11.7	59	10.2	56	13.0				
Staten Island	22	2.1	8	1.4	7	1.6				
NYC Borough Unknown	0	_	3	0.5	1	0.2				
Rest of State	142	13.5	61	10.5	49	11.4				
Current Age (Living with	AIDS)									
<6 years	9	0.9	14	2.4	40	9.3				
6-10 years	128	12.2	108	18.7	87	20.2				
11-15	166	15.8	66	11.4	51	11.8				
16-23	45	4.3	22	3.8	8	1.9				
Deceased	702	66.9	369	63.7	245	56.8				
Total	1,050	100.0	579	100.0	431	100.0				

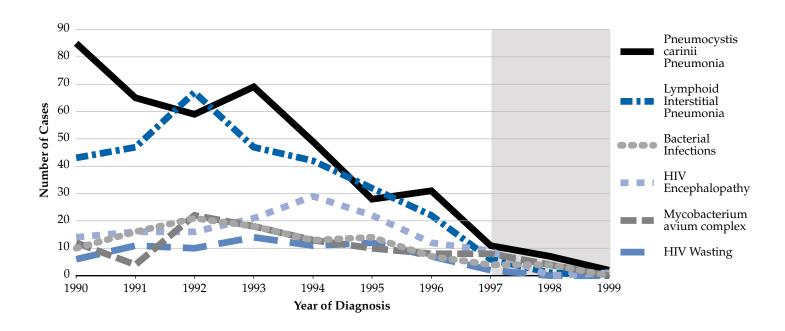
^{*} Includes 23 cases for whom perinatal HIV exposure was receipt of transfusion/tissue. Exposure category for the remaining 408 mothers was not reported.

Figure 12-5

Selected Diseases at Diagnosis* Among Pediatric AIDS Cases by Year of Diagnosis

New York State, Cases Confirmed through March 2000

	Pneumocystis carinii Pneumonia	Lymphoid Interstitial Pneumonia	Bacterial Infections	HIV Encephalopathy	Mycobacterium avium complex		
1990	85	43	10	14	12	6	
1991	65	47	16	16	4	11	
1992	59	67	21	16	22	10	
1993	69	47	18	21	18	14	
1994	49	42	13	29	13	11	
1995	28	32	14	22	10	12	
1996	31	22	7	12	8	7	
1997	11	6	4	9	8	2	
1998 ⁺	7	1	4	0	4	0	
1999†	2	0	0	1	0	0	
Total	406	307	107	140	99	73	



^{*} Based on initial AIDS-defining condition; more than one condition may have been reported at the time of diagnosis.

[†] Data for 1998 and 1999 are incomplete due to lag in case reporting and time required for case confirmation.